

Who is currently living with HIV/AIDS? Detailed data tables and technical notes

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases who were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2012, this resulted in the removal of 2,924 HIV/AIDS cases, of which 808 have died and 2,116 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS surveillance system. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the Massachusetts Department of Public Health (MDPH) HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 41% of recent female HIV diagnoses are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

These data represent only those individuals who tested positive for HIV infection, have sought and accessed medical care *and* have been reported to the HIV/AIDS Surveillance Program. Individuals who are unaware of their status, not in care, or not reported are not reflected.

The profile of people living with HIV/AIDS presented in “*Who is currently living with HIV/AIDS?*” can be used to inform planning for HIV care, treatment and support services, as well as the planning of prevention programs for people living with HIV/AIDS (positive prevention).

Table 1. People living with HIV/AIDS on December 31, 2011 by gender, race/ethnicity, place of birth and health service region: Massachusetts¹

People Living with HIV/AIDS on 12/31/11		
Gender:	N	%
Male	12,917	71%
Female	5,253	29%
Race/Ethnicity:	N	%
White, non-Hispanic	7,966	44%
Black, non-Hispanic	5,382	30%
Hispanic/Latino	4,460	25%
Asian/Pacific Islander	287	2%
Other/Unknown	75	<1%
Place of Birth:	N	%
US	12,007	66%
Puerto Rico/US Dependency ²	1,989	11%
Non-US	4,174	23%
Health Service Region³:	N	%
Boston HSR	5,723	31%
Central HSR	1,595	9%
Metro West HSR	2,558	14%
Northeast HSR	2,830	16%
Southeast HSR	2,502	14%
Western HSR	2,008	11%
Prison ⁴	953	5%
Total⁵	18,170	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Ninety-eight percent of people living with HIV/AIDS who were born in a US Dependency were born in Puerto Rico, <1% were born in the US Virgin Islands, <1% were born in Guam and 2% were born in an unknown dependency.

³ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions.

⁴ HSRs are regions defined geographically to facilitate targeted health service planning. While prisons are not an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status.

⁵ Total includes one person living with HIV/AIDS with unknown HSR.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/12

Table 2. People living with HIV/AIDS on December 31, 2011 by gender and race/ethnicity: Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White, non-Hispanic	6,595	51%	1,371	26%
Black, non-Hispanic	3,059	24%	2,323	44%
Hispanic/Latino	2,992	23%	1,468	28%
Asian/Pacific Islander	222	2%	65	1%
Other/Unknown	49	<1%	26	<1%
Total	12,917	100%	5,253	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/12

Table 3. People living with HIV/AIDS on December 31, 2011 by race/ethnicity and place of birth: Massachusetts¹

Race/Ethnicity:	US		Puerto Rico/ US Dependency ²		Non-US		Total
	N	%	N	%	N	%	N
White NH	7,479	94%	16	<1%	471	6%	7,966
Black NH	2,968	55%	16	<1%	2,398	45%	5,382
Hispanic/Latino	1,423	32%	1,957	44%	1,080	24%	4,460
API	73	25%	0	0%	214	75%	287
Other/Unknown	64	85%	0	0%	11	15%	75

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Ninety-eight percent of people living with HIV/AIDS who were born in a US Dependency were born in Puerto Rico, <1% were born in the US Virgin Islands, <1% were born in Guam and 2% were born in an unknown dependency.

NH= Non-Hispanic, API=Asian/Pacific Islander

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/12

Table 4. People living with HIV/AIDS on December 31, 2011 by gender and place of birth: Massachusetts¹

Place of Birth:	Male		Female	
	N	%	N	%
United States (US)	9,166	71%	2,841	54%
Puerto Rico/US Dependency ²	1,308	10%	681	13%
Non-US	2,443	19%	1,731	33%
Total	12,917	100%	5,253	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Ninety-eight percent of people living with HIV/AIDS who were born in a US Dependency were born in Puerto Rico, <1% were born in the US Virgin Islands, <1% were born in Guam and 2% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/12

Table 5. People living with HIV/AIDS on December 31, 2011 by current age and gender: Massachusetts¹

Age in years	Male		Female		State Total	
	N	%	N	%	N	%
Under 13	24	<1%	24	<1%	48	<1%
13 to 19	88	1%	71	1%	159	1%
20 to 24	189	1%	115	2%	304	2%
25 to 29	388	3%	166	3%	554	3%
30 to 34	617	5%	385	7%	1,002	6%
35 to 39	921	7%	583	11%	1,504	8%
40 to 44	1,833	14%	885	17%	2,718	15%
45 to 49	2,834	22%	1,076	20%	3,910	22%
50 to 54	2,671	21%	879	17%	3,550	20%
55 to 59	1,769	14%	584	11%	2,353	13%
60+	1,583	12%	485	9%	2,068	11%
Total	12,917	100%	5,253	100%	18,170	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/12

Table 6. People living with HIV/AIDS by exposure mode: Massachusetts¹		
People Living with HIV/AIDS on 12/31/11		
Exposure Mode:	N	%
Male-to-male sex (MSM)	6,498	36%
Injection drug use (IDU)	3,863	21%
MSM/IDU	605	3%
Receipt of blood/blood products/other	76	<1%
Pediatric	340	2%
Total heterosexual sex (HTSX)	2,613	14%
• HTSX w/ an injection drug user	891	5%
• HTSX w/ bisexual male (females only)	43	<1%
• HTSX w/ a person w/ HIV or AIDS	1,636	9%
• Other HTSX ²	43	<1%
Total undetermined/other	4,171	23%
• Presumed heterosexual sex ³	1,520	8%
• Undetermined/other ⁴	2,651	15%
Total	18,170	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes heterosexual sex with a person who received blood/blood products.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/12

Note: The category of “presumed heterosexual” is used in Massachusetts to re-assign females who are reported with an exposure of heterosexual sex, but only with a partner of unknown HIV status or behavioral risk. Massachusetts uses the category of presumed heterosexual to distinguish these female cases from other undetermined cases about which we know less. Prior to January 1, 2011, the presumed heterosexual category was also used to report HIV data in males. The rationale for the application of the presumed heterosexual exposure mode category to females only has been addressed in the MDPH OHA report “Intersecting Risks: HIV Infection among Heterosexual Women and Men in Massachusetts.” (2010) http://www.mass.gov/Eeohhs2/docs/dph/aids/intersecting_risks.pdf. Nationally, the Centers for Disease Control and Prevention categorize “presumed heterosexual” cases as “no identified risk” (NIR). As such, comparisons of the presumed heterosexual category cannot be made to national data. Caution should be used in interpreting data for presumed heterosexual, as it is still not clear what the exposure risk was for females in this category. Although a person may not report other risk behaviors, such as injection drug use to a health care provider, it does not exclude the possibility that an individual has experienced these other risks. There are many barriers to disclosing HIV risk behaviors in the health care setting such as a limited patient-provider relationship or stigma.

Table 7. People living with HIV/AIDS on December 31, 2011 by gender and exposure mode: Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	6,498	50%	N/A	N/A
Injection drug use (IDU)	2,562	20%	1,301	25%
MSM/IDU	605	5%	N/A	N/A
Heterosexual sex	769	6%	1,844	35%
Other	231	2%	189	4%
Total undetermined/other	2,252	17%	1,919	37%
• Presumed heterosexual sex ²	N/A	N/A	1,520	29%
• Undetermined ³	2,252	17%	399	8%
Total	12,917	100%	5,253	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/12

Table 8. People living with HIV/AIDS on December 31, 2011 by race/ethnicity¹ and exposure mode: Massachusetts²

Exposure Mode:	White NH		Black NH		Hispanic/Latino		API	
	N	%	N	%	N	%	N	%
Male-male sex (MSM)	4,623	58%	843	16%	885	20%	122	43%
Injection drug use (IDU)	1,401	18%	913	17%	1,522	34%	17	6%
MSM/IDU	372	5%	107	2%	119	3%	2	1%
Heterosexual sex	558	7%	1,120	21%	890	20%	32	11%
Other	125	2%	165	3%	124	3%	5	2%
Total undetermined/other	887	11%	2,234	42%	920	21%	109	38%
• Pres. HTSX ³	221	3%	970	18%	300	7%	22	8%
• Undetermined ⁴	666	8%	1,264	23%	620	14%	87	30%
Total	7,966	100%	5,382	100%	4,460	100%	287	100%

¹ Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

NH = Non-Hispanic, API = Asian/Pacific Islander, Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/12

Table 9. Males living with HIV/AIDS on December 31, 2011 by race/ethnicity¹ and exposure mode: Massachusetts²

	White NH		Black NH		Hispanic/ Latino		API	
Exposure Mode:	N	%	N	%	N	%	N	%
Male-male sex (MSM)	4,623	70%	843	28%	885	30%	122	55%
Injection drug use (IDU)	788	12%	617	20%	1,137	38%	14	6%
MSM/IDU	372	6%	107	3%	119	4%	-- ⁴	-- ⁴
Heterosexual sex	144	2%	353	12%	258	9%	12	5%
Other	76	1%	87	3%	67	2%	-- ⁴	-- ⁴
Undetermined ³	592	9%	1,052	34%	526	18%	71	32%
Total	6,595	100%	3,059	100%	2,992	100%	222	100%

¹ Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.⁴ Percentages calculated from a numerator of less than 5 and a denominator of less than 100 are not presented.

NH = Non-Hispanic, API = Asian/Pacific Islander

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/12

Table 10. Females living with HIV/AIDS on December 31, 2011 by race/ethnicity¹ and exposure mode: Massachusetts²

	White NH		Black NH		Hispanic/ Latina		API	
Exposure Mode:	N	%	N	%	N	%	N	%
Injection drug use	613	45%	296	13%	385	26%	-- ⁵	-- ⁵
Heterosexual sex	414	30%	767	33%	632	43%	20	31%
Other	49	4%	78	3%	57	4%	-- ⁵	-- ⁵
Total undetermined/other	295	22%	1,182	51%	394	27%	38	58%
• Pres. HTSX ³	221	16%	970	42%	300	20%	22	34%
• Undetermined ⁴	74	5%	212	9%	94	6%	16	25%
Total	1,371	100%	2,323	100%	1,468	100%	65	100%

¹ Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.⁴ Includes those still being followed up for risk information, those who have died with no determined risk and those lost to follow-up, and those with confirmed occupational exposure.⁵ Percentages calculated from a numerator of less than 5 and a denominator of less than 100 are not presented.

NH = Non-Hispanic, API = Asian/Pacific Islander, Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/12

Table 11. People living with HIV/AIDS on December 31, 2011 by Health Service Region (HSR)¹ and gender: Massachusetts²

Health Service Region	Male		Female		Total
	N	%	N	%	N
Boston HSR	4,363	76%	1,360	24%	5,723
Central HSR	982	62%	613	38%	1,595
Metro West HSR	1,832	72%	726	28%	2,558
Northeast HSR	1,877	66%	953	34%	2,830
Southeast HSR	1,770	71%	732	29%	2,502
Western HSR	1,264	63%	744	37%	2,008
Prison ³	829	87%	124	13%	953
Massachusetts Total⁴	12,917	71%	5,253	29%	18,170

¹ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status.

⁴ Mass. total includes one person living with HIV/AIDS with unknown residence at time of report.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding) , data as of 1/1/12

Table 12. Percentage distribution of people living with HIV/AIDS on December 31, 2011 by Health Service Region (HSR)¹ and race/ethnicity: Massachusetts²

HSR	White NH		Black NH		Hispanic/ Latino		API		Other/Und.		Total
	N	%	N	%	N	%	N	%	N	%	N
Boston	2,320	41%	2,213	39%	1,086	19%	87	2%	17	<1%	5,723
Central	679	43%	387	24%	505	32%	21	1%	3	<1%	1,595
Metro West	1,290	50%	885	35%	319	12%	55	2%	9	<1%	2,558
Northeast	1,222	43%	663	23%	844	30%	90	3%	11	<1%	2,830
Southeast	1,547	62%	552	22%	369	15%	16	1%	18	1%	2,502
Western	624	31%	387	19%	968	48%	15	1%	14	1%	2,008
Prison ³	283	30%	295	31%	369	39%	3	<1%	3	<1%	953
Total⁴	7,966	44%	5,382	30%	4,460	25%	287	2%	75	<1%	18,170

¹ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at

http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status.

⁴ Mass. total includes one person living with HIV/AIDS with unknown residence at time of report.

NH= Non-Hispanic , API = Asian/Pacific Islander, Other/Und. = Other/Undetermined

Data Source: MDPH HIV/AIDS Surveillance Program, data as of 1/1/12

Table 13. Percentage distribution of people living with HIV/AIDS on December 31, 2011 by Health Service Region (HSR)¹ and exposure mode: Massachusetts²

HSR	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undet. ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
Boston	2,714	47%	787	14%	190	3%	722	13%	110	2%	445	8%	755	13%	5,723
Central	373	23%	465	29%	47	3%	300	19%	47	3%	167	10%	196	12%	1,595
Metrowest	1,004	39%	316	12%	73	3%	350	14%	70	3%	269	11%	476	19%	2,558
Northeast	870	31%	519	18%	81	3%	441	16%	72	3%	306	11%	541	19%	2,830
Southeast	974	39%	544	22%	80	3%	377	15%	58	2%	164	7%	305	12%	2,502
Western	495	25%	595	30%	67	3%	367	18%	63	3%	159	8%	262	13%	2,008
Prison ⁵	68	7%	636	67%	67	7%	56	6%	0	0%	10	1%	116	12%	953
Total	6,498	36%	3,863	21%	605	3%	2,613	14%	420	2%	1,520	8%	2,651	15%	18,170

¹ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at

http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/12